Annual Report

2014-15

Newfoundland Labrador

Fisheries and Aquaculture

MESSAGE FROM THE MINISTER

As Minister of Fisheries and Aquaculture, I am pleased to present the 2014-15 Annual Report for the Department of Fisheries and Aquaculture. I am accountable for the results contained in this report, which was prepared in accordance with the *Transparency and Accountability Act*. This report details the progress that has been made towards achieving the goals and objectives outlined in the first year of our 2014-17 Strategic Plan.

The Provincial Government supports the continued development and success of Newfoundland and Labrador's seafood industry. Areas of focus include fishing industry sustainability, aquaculture sustainability, and market development. Emphasis on the sustainability of the fishing and aquaculture industries will lend support to both fisheries sector viability and sustainable development and management, which are key focus areas of government's strategic direction. The department's backing of marketing initiatives will support market development and expansion, while assisting industry's ability to capitalize on new opportunities in both sectors.

The provincial seafood industry is a substantial contributor to Newfoundland and Labrador's economy, with total production in 2014 valued at approximately $954 million. Economic activity generated by the fishing and aquaculture sectors provided employment for nearly 18,000 people in over 400 communities. The particular economic impacts of the aquaculture industry on the province's gross domestic product, employment, and labour income have been well-documented, with aquaculture activity contributing approximately $104 million to the provincial gross domestic product in 2013. Our government is committed to working closely with the aquaculture industry to foster this business activity, which drives significant rural economic activity.

Our province also continues to be a strong competitor in global seafood markets, with provincial seafood being exported to more than 40 countries in 2014. The Provincial Government continues to support this success by investing millions to support various marketing initiatives for the provincial seafood industry.

I am pleased with the results achieved by the department throughout 2014-15. The department will continue to work with all of our partners to strengthen our world-class seafood industry and to support continued economic and social benefits for the people of Newfoundland and Labrador.

Vaughn Granter, MHA
Humber West
Minister of Fisheries and Aquaculture

ACRONYMS AND ABBREVIATIONS

ACE - Atlantic Canada Export
ACOA - Atlantic Canada Opportunities Agency
AIS - Aquatic Invasive Species
ASP - Association of Seafood Producers
BTCRD - Department of Business, Tourism, Culture, and Rural Development
CETA - Comprehensive Economic and Trade Agreement
CFER - Centre for Fisheries Ecosystems Research
CKFTA - Canada-Korea Free Trade Agreement
DFA - Department of Fisheries and Aquaculture
DFO - Fisheries and Oceans Canada
EU - European Union
FFAW - Fish, Food and Allied Workers
FTNOP - Fisheries Technology and New Opportunities Program
GDP - Gross Domestic Product
MI - Marine Institute
MPRs - Minimum Processing Requirements
MSC - Marine Stewardship Council
NAIA - Newfoundland Aquaculture Industry Association
OCI - Ocean Choice International
PFHCB - Professional Fish Harvesters Certification Board

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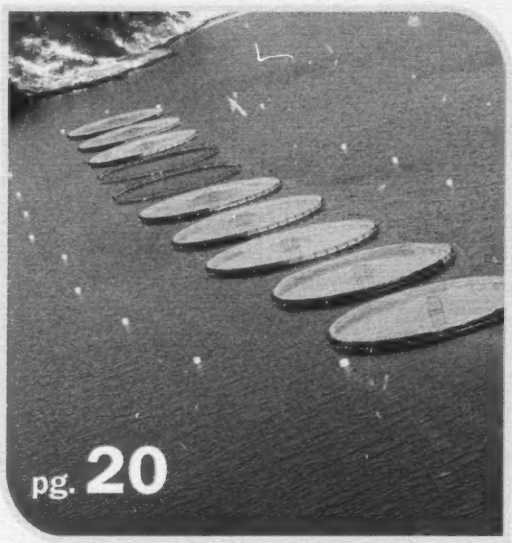

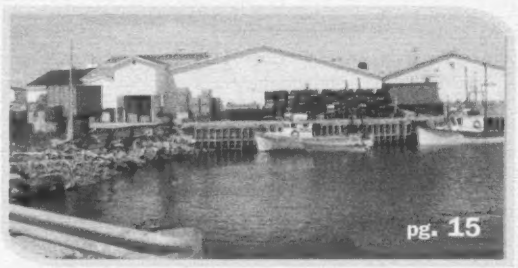

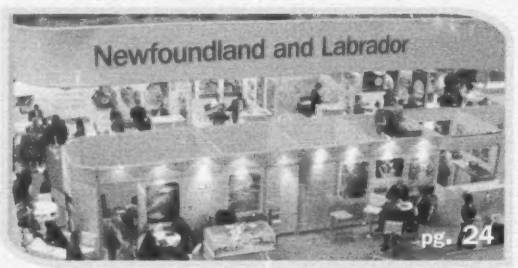

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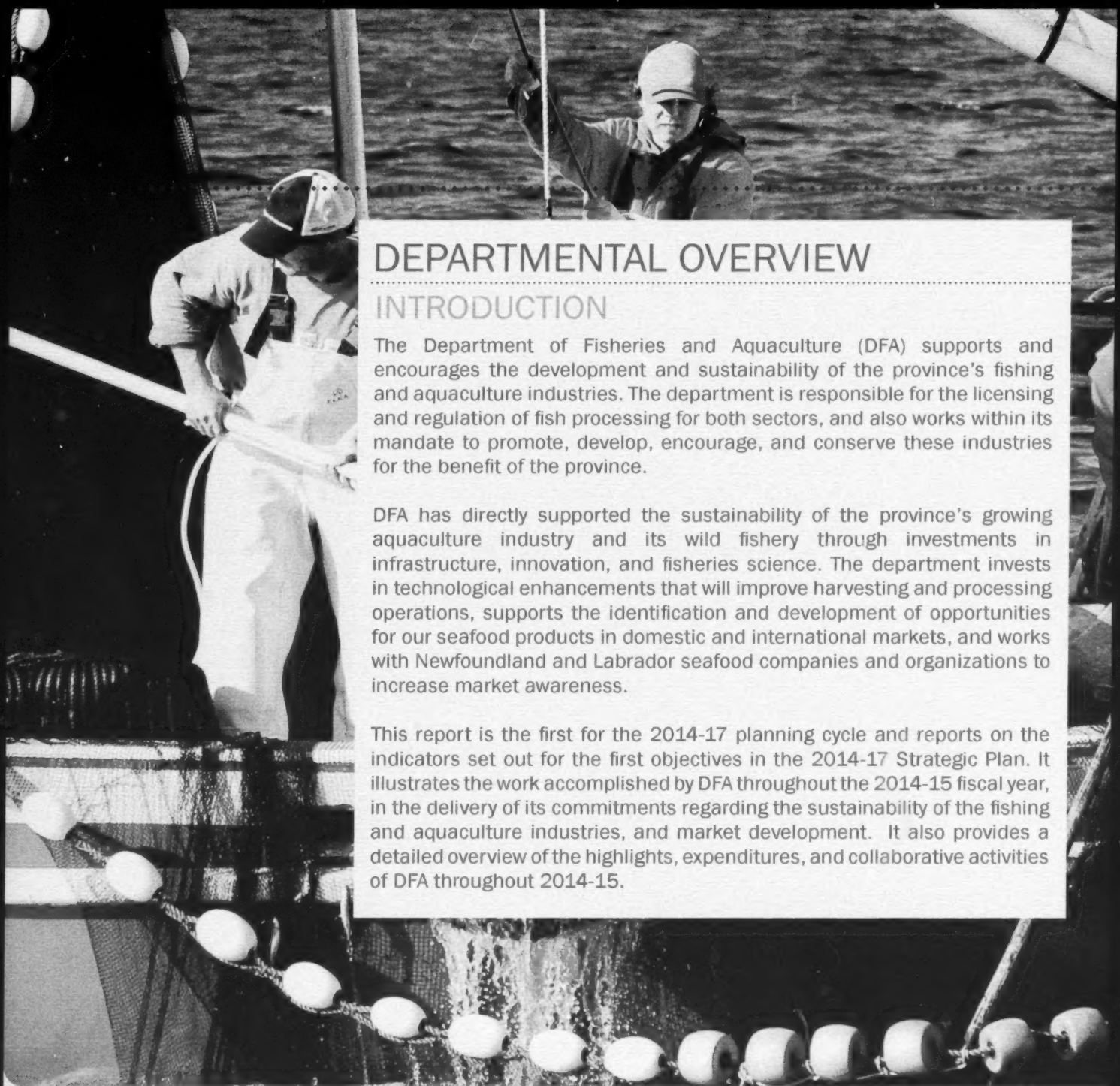


DEPARTMENTAL OVERVIEW

INTRODUCTION

The Department of Fisheries and Aquaculture (DFA) supports and encourages the development and sustainability of the province's fishing and aquaculture industries. The department is responsible for the licensing and regulation of fish processing for both sectors, and also works within its mandate to promote, develop, encourage, and conserve these industries for the benefit of the province.

DFA has directly supported the sustainability of the province's growing aquaculture industry and its wild fishery through investments in infrastructure, innovation, and fisheries science. The department invests in technological enhancements that will improve harvesting and processing operations, supports the identification and development of opportunities for our seafood products in domestic and international markets, and works with Newfoundland and Labrador seafood companies and organizations to increase market awareness.

This report is the first for the 2014-17 planning cycle and reports on the indicators set out for the first objectives in the 2014-17 Strategic Plan. It illustrates the work accomplished by DFA throughout the 2014-15 fiscal year, in the delivery of its commitments regarding the sustainability of the fishing and aquaculture industries, and market development. It also provides a detailed overview of the highlights, expenditures, and collaborative activities of DFA throughout 2014-15.

VISION

The vision of the Department of Fisheries and Aquaculture is sustainable fishing and aquaculture industries that achieve their optimum economic contribution to the Province of Newfoundland and Labrador.

MISSION

By March 31, 2017, the Department of Fisheries and Aquaculture will have supported both the strengthening of the fishing industry and the expansion of the aquaculture industry to create sustainable and economic opportunities for the province.

LINES OF BUSINESS

POLICY AND PLANNING

The department develops policies and provides advice on fisheries and aquaculture issues in support of resource and industry management, research, growth, and development. Specific activities include fisheries and aquaculture policy review, analysis, and development; review of fisheries management plans and scientific assessments conducted by Fisheries and Oceans Canada (DFO); strategic planning; program development and review; review and analysis of legislation; information management and administration; seafood trade policy research and analysis; collection, compilation, and presentation of statistical data; support to fisheries and aquaculture science; and the completion of economic, financial, and statistical analysis.

Through this line of business, the department maintains close affiliations with other government departments and agencies which have programs that impact on the province's seafood industry. In addition, the department represents the province's interests at national and international venues and provides input into the resource assessment and ocean management processes of DFO and international bodies responsible for fisheries assessment and management. Specifically, the department assesses scientific advice for various stocks and species, participates on resource assessment and management advisory committees, and assesses the environmental impact of development upon fisheries resources.

The department plays a lead role in fisheries, aquaculture, and integrated ocean management within the province by promoting and supporting initiatives that allow for more organized and efficient structures to deal with ocean management issues. A focus is placed on those initiatives that impact the province's fishing and aquaculture industries, as outlined in government's Coastal and Ocean Management Strategy and Policy Framework.

INSPECTION, COMPLIANCE, AND REGULATORY ENFORCEMENT

The department performs comprehensive inspection, compliance, and regulatory enforcement duties for the fishing and aquaculture industries within its legislative authority. Fisheries Field Representatives ensure the seafood industry utilizes proper handling techniques and meets regulatory requirements, and they conduct inspections at fish buying stations, processing plants, aquaculture sites, dockside, and on board vessels throughout the province. In addition, the department is responsible for auditing fish buyers and processors located throughout the province to ensure compliance with regulations, policies, and conditions of licences.

Aquaculture and inspection staff examine aquaculture sites for fish health, compliance with the Code of Containment, and proper site boundary markings. Programs related to biosecurity, surveillance, and regulation of fish health on aquaculture sites throughout the province are included in this line of business. These activities ensure compliance with the *Aquaculture Act* and Regulations, *Fish Inspection Act* and Regulations, and ministerial directives. The department reviews infractions of the acts and directives and takes appropriate legal action.

INNOVATION AND DEVELOPMENT

DFA places a strong emphasis on fisheries and aquaculture research, innovation, and development. It assists the fishing and aquaculture industries through the provision of technical and financial support in the development of culturing, harvesting, processing, and marketing. Innovation within the fisheries and aquaculture sectors is fostered through extensive interaction with the private sector, industry-related organizations, other government departments, and academia.

The department provides financial assistance for industry-led research and development projects in the fishing industry through the Fisheries Technology and New Opportunities Program (FTNOP). This support includes the following activities:

Harvesting and Resource Development

Although harvesting is an area of federal jurisdiction, DFA's primary focus for this activity is to oversee the design and implementation of fisheries development projects with a focus on the assessment of species with underdeveloped fisheries, enhancing quality, resource surveys, the development of commercial species, and the utilization of appropriate on-board handling technologies aimed at maximizing catch value. DFA is also responsible for providing a range of technical services to the fishing industry, including expertise on vessel efficiency, sustainable fishing technology, and safety.

Processing Development

The goal of this activity is to enhance the productivity and competitiveness of the processing sector with a focus on the development of value-added and secondary production, development of underutilized species, and by-product recovery. Assistance is provided in the form of technical and financial support related to product development, processing technology, packaging systems, and processing efficiency.

Aquaculture Development

The department provides technical advice and support to the aquaculture industry. This includes the assessment of species and sites, the review of development proposals, and the acquisition of data to explore the technical and/or economic aspects of development. The department also supports aquaculture development through aquaculture health extension services, which provide front-line veterinary medicine and diagnostic services.

LICENSING AND QUALITY ASSURANCE

DFA is responsible for the issuance of fish buyers' licences, fish processing licences, and aquaculture site licences, as well as the development and implementation of policies and regulations related to each type of licence. The department provides processing licensing policies and procedures to the Fish Processing Licensing Board. The board reviews and makes recommendations to the Minister of Fisheries and Aquaculture on all requests for new processing licences, transfers of licences, and changes of operator for fish processing plants, as well as appeals for reinstatement of licences cancelled due to inactivity. In its role as a licensing agency for aquaculture, as regulated under the *Aquaculture Act*, the department coordinates input from all relevant provincial and federal departments and agencies, as well as any organizations, groups, or individuals who have interest in aquaculture development.

Other activities include:

Administration of Licensing Systems and Databases

Administration of the licensing information management systems, online services, and databases includes the collection and analysis of all information associated with fish purchases, production, and employment, and cataloguing the current and past history of fish buyers' and fish processing licences. Through these licensing processes, the department collects processing and aquaculture statistics. Data collected includes processing plant production, fish purchases, plant employment, production on aquaculture farms, aquaculture employment, fisheries and aquaculture infrastructure, financial information, and inspection information

Maintenance and Delivery of the Quality Assurance Program

The Quality Assurance Program supports the department's efforts to promote quality awareness in the fishing and aquaculture industries. The department monitors and assesses the quality of fish at dockside, in transport, and as it enters plants for processing; develops and evaluates new techniques to assess quality; produces and disseminates information on quality issues to industry participants; and implements measures for quality enhancement.

SEAFOOD MARKETING

DFA provides marketing support services to the Newfoundland and Labrador seafood industry and works with industry stakeholders on innovative and collective approaches to seafood market development. The department's primary seafood and fish products marketing activities include:

Market Development

The department works with the seafood industry to increase market awareness of and demand for Newfoundland and Labrador seafood and fish products and to increase exports to markets throughout the world. Marketing support services offered to industry include participation in trade shows and missions, advertising, food service and retail promotions, education, and support for private sector market and trade development initiatives.

Market Intelligence and Analysis

DFA provides market analysis and support by coordinating the collection and dissemination of timely market intelligence and information to industry stakeholders. Market information is provided to the Standing Fish Price-Setting Panel (in support of fish price collective bargaining initiatives), processor and harvester associations such as the Association of Seafood Producers (ASP), the Seafood Processors of Newfoundland and Labrador, and the Fish, Food and Allied Workers (FFAW). Information is also provided to the Newfoundland Aquaculture Industry Association (NAIA) and aquaculture companies to support strategic market development efforts.

Outreach

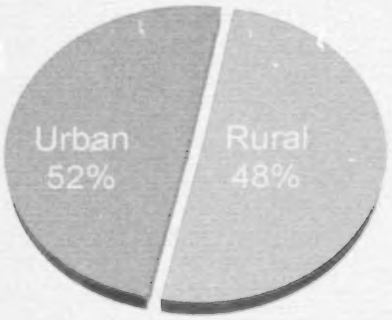
The department interacts with other Provincial Government departments, the governments of other seafood-producing provinces, federal departments and agencies such as the Atlantic Canada Opportunities Agency (ACOA), Agriculture and Agri-Food Canada, DFO, and Foreign Affairs, Trade and Development to coordinate participation in various trade shows and missions, and to cooperate on joint marketing and promotional activities.

MANDATE

Realizing the optimum sustainable economic benefit from the fishing and aquaculture industries through the promotion, development, encouragement, conservation, and regulation of fisheries and aquaculture and the provision of long-term strategic direction on the sustainable use of coastal and ocean resources in Newfoundland and Labrador.

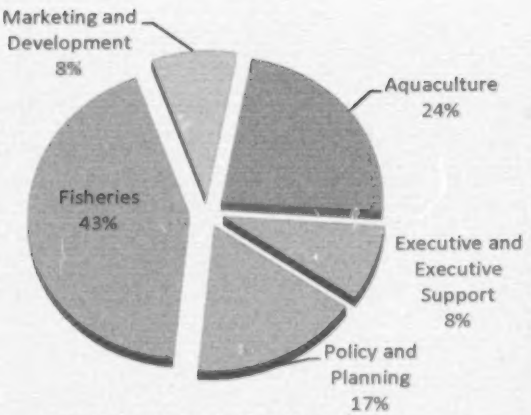
Departmental Map

DFA headquarters is located in St. John's and the Aquaculture Branch main office is located in Grand Falls-Windsor. The department had 4 regional offices and 10 satellite offices situated throughout the province in 2014-15. The percentage (rounded) of departmental staff located at each office is indicated.



Employee Distribution by Urban/Rural

Employee Distribution by Gender



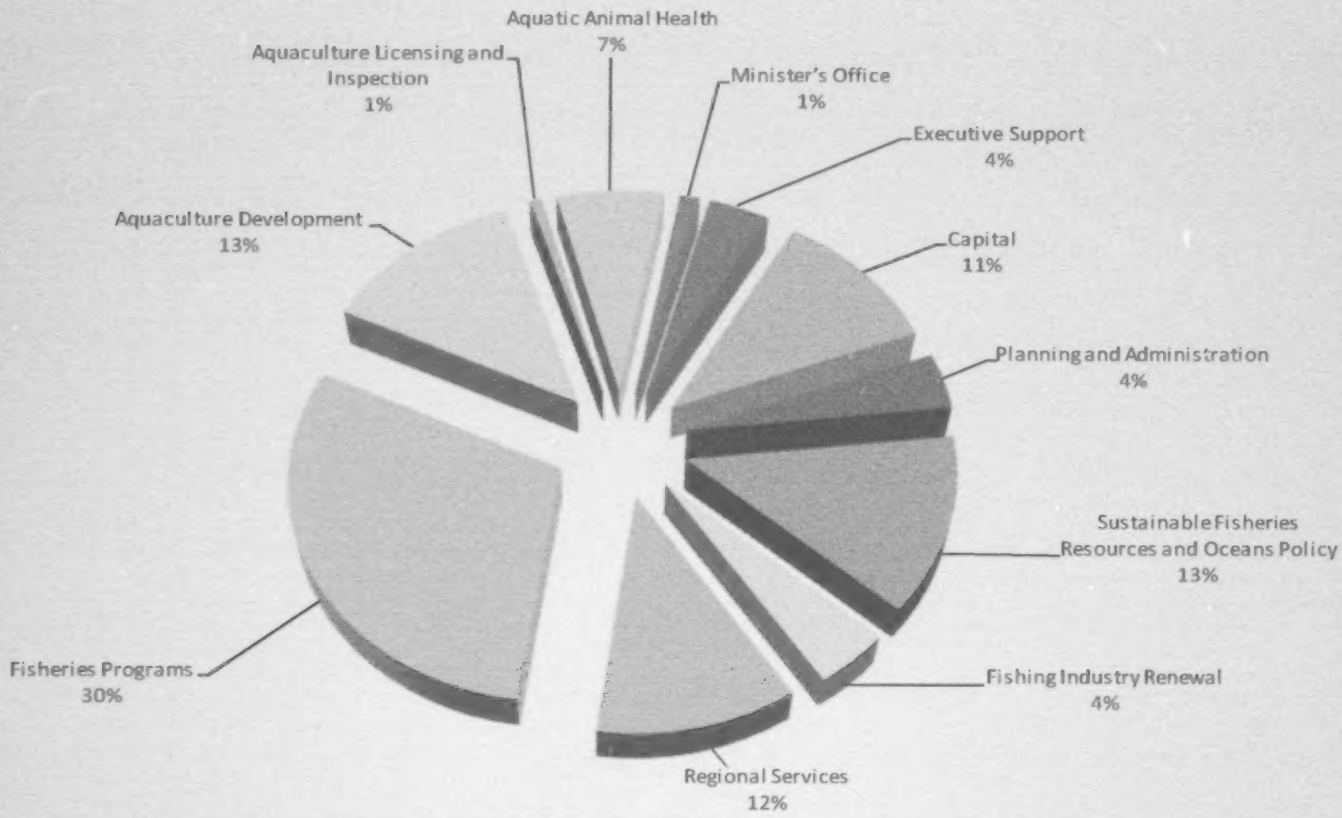
Employee Distribution by category

NUMBER OF EMPLOYEES

The department employs 107 people, working in 4 broad categories:
a) Fisheries; b) Aquaculture; c) Marketing and Development; and d) Policy and Planning.

NEWFOUNDLAND AQUACULTURE INDUSTRY ASSOCIATION
Scientific Based
Newfoundland farmers embrace a culture of innovation and continuous improvement, and are
NEWFOUNDLAND AQUACULTURE INDUSTRY ASSOCIATION
Rural Based
The Newfoundland Aquaculture industry provides a sustainable economic alternative for rural and coastal communities.
Market Based
The Newfoundland Aquaculture industry produces among the safest, most nutritious, healthiest and tastiest seafood in the world and demand for our product is growing!

DISTRIBUTION OF ACTUAL NET EXPENDITURES 2014-15



LEGISLATION

The department's work is guided by the following provincial and federal legislation:

Provincial Legislation

- *Aquaculture Act* and Regulations
- *Business Investment Corporation Act* (Fisheries Loan Guarantee Program)
- *Fish Inspection Act* and Regulations
  - Fish Inspection Administrative Regulations
  - Fish Inspection Operations Regulations
  - Fish Inspection Ticket Offences Regulations
- *Fish Processing Licensing Board Act*
- *Fisheries Act* (Schedule C of the *Executive Council Act*)
- *Fisheries Restructuring Act*
- *Fishing Industry Collective Bargaining Act*
- *Professional Fish Harvesters Act*

Federal Legislation

- *Fisheries Act*
- *Fish Inspection Act*
- *Oceans Act*
- Marine Mammal Regulations
- *Species at Risk Act*

Department of Fisheries and Aquaculture
Statement (Unaudited) of Expenditures and Related Revenue

Summary for the Year Ended March 31, 2015*	ESTIMATES		
	Original	Amended	Actual
	$	$	$
EXECUTIVE AND SUPPORT SERVICES			
Minister's Office			
Minister's Office	315,600	315,600	302,443
General Administration			
Executive Support	787,700	978,400	944,084
Capital	3,901,500	3,901,500	2,688,725
Policy and Planning Services			
Planning and Administration	1,089,100	1,089,100	1,013,197
Revenue - Provincial	-2,000	-2,000	-20,581
Sustainable Fisheries Resources and Oceans Policy	3,261,000	3,219,000	3,167,325
Fishing Industry Renewal			
Coordination and Support Services	1,647,500	1,647,500	1,032,168
Executive and Support Services Subtotal	**11,000,400**	**11,149,100**	**9,127,361**
FISHERIES DEVELOPMENT			
Regional Services			
Administration and Support Services	3,126,700	3,106,700	2,741,494
Revenue - Provincial	-10,000	-10,000	-16,396
Fisheries Programs			
Seafood Marketing and Support Services	1,158,800	1,158,800	861,913
Revenue - Provincial	-45,000	-45,000	-34,121
Licensing and Quality Assurance	429,200	429,200	344,644
Compliance and Enforcement	502,300	412,300	358,835
Fisheries innovation and Development	3,992,400	4,013,700	3,674,566
Capital - Sealing Industry Inventory Financing	-	2,000,000	2,000,000
Fisheries Subtotal	**9,154,400**	**11,065,700**	**9,930,935**
AQUACULTURE			
Aquaculture Development			
Aquaculture Development and Management	1,482,000	1,422,000	1,253,099
Aquaculture Capital Equity Investment	6,000,000	4,000,000	1,862,250[1]
Aquaculture Licensing and Inspection			
Aquaculture Licensing and Inspection	201,800	201,800	182,706
Aquatic Animal Health			
Aquatic Animal Health	1,855,200	1,855,200	1,640,318
Aquaculture Subtotal	**9,539,000**	**7,479,000**	**4,938,373**
Department Total	**29,693,800**	**29,693,800**	**23,996,669**

*Source Document: Report on Program Expenditures and Revenues of the Consolidated Revenue Fund for the Year Ended 31 March 2015 (Unaudited).
Note: Audited financial statements are not required of the Department of Fisheries and Aquaculture.
[1] Includes both advances and approximately $1.5 million in repayments under the Aquaculture Capital Equity Program.

SHARED COMMITMENTS

In 2014-15, the department worked collaboratively with industry stakeholders, government departments, academic institutions, and public bodies, towards the achievement of the goals set out in its 2014-17 Strategic Plan. Following are examples of collaborative activities the department was engaged in that relate to and support the strategic direction of government to strengthen the roles of the fishing and aquaculture industries via four focus areas.

Fisheries Sector Viability

In 2014-15, DFA contributed to fishing industry viability through its participation, as a member of Canadian delegations, in a number of processes which allow input into sustainable management of fish stocks. In September 2014, DFA participated in the 36th Annual Meeting of the Northwest Atlantic Fisheries Organization along with other Canadian delegates which included the FFAW, the Torngat Secretariat, and representatives of the offshore groundfish and shrimp sectors. The delegation provided advice to the Federal Government on Canada's positions regarding the sustainable management of straddling fish stocks. The delegation also provided advice on several issues including quota levels for 2015, measures to ensure the accuracy of catch estimates, and the adoption of a management plan for 3LN redfish to ensure its sustainable management. DFA, in partnership with the Professional Fish Harvesters Ceritification Board (PFHCB) and the FFAW, organized a one-day workshop for harvesters in the under 35-foot sector focusing on vessel innovation and harvesting quality. The workshop presented information on technology and best practices followed by an open discussion regarding what the workshop participants need to do to prepare for an emerging groundfish fishery.

In March 2015, DFA participated in the 21st Annual Meeting of the Canada/France Advisory Committee regarding the Canada-France Fisheries Agreement Procès-Verbal in relation to St. Pierre and Miquelon. As a member of the Canadian delegation, along with the FFAW, Ocean Choice International (OCI), Icewater Seafoods, and the Fisheries Council of Canada, DFA provided advice to the Federal Government on Canada's positions regarding the sustainable management of fish stocks under the Procès-Verbal Agreement, including 3Ps cod.

To identify issues and solutions related to aquatic invasive species (AIS), which potentially threaten the sustainability of both the fishing and aquaculture sectors, the department worked with DFO, other Provincial Government departments, industry stakeholders, and academia. DFA participates in a federal/provincial AIS working group, which met in July 2014 to identify action items, including the development of best management practices. DFA is also a member of the provincial AIS stakeholder committees which met several times in 2014-15 to share information on AIS across the province.

Market Development and Expansion

To foster market development and expansion opportunities in the seafood industry, the department collaborated with a number of industry and government partners in 2014-15. Partnering with the Restaurant Association of Newfoundland and Labrador, the Newfoundland and Labrador Chef's Association, and the Department of Natural Resources, DFA participated in the "From This Rock" culinary events. The department contributed $4,600 to participate in this initiative which promoted Newfoundland and Labrador agrifood and seafood products.

COLLABORATIVE FISHERIES RESEARCH

In 2014-15, DFA provided funding towards the following collaborative fisheries research activities to enhance knowledge of adjacent fish stocks. These activities inform the sustainable development and management of the province's fishing industry and contribute to fisheries sector viability.

- Tagging studies to investigate the distribution and migration patterns of Atlantic halibut in the Gulf of St. Lawrence, and to investigate possible spawning grounds for mackerel, carried out by the Centre for Fisheries Ecosystems Research (CFER) and the FFAW in collaboration with DFO.
- Tagging studies to assess the movements of 3Ps cod and 2J3KL cod carried out by the FFAW in collaboration with fish harvesters and DFO's Fisheries Science Collaborative Program.
- Surveys to assess the biomass and recruitment prospects of lobster and snow crab in areas around Newfoundland and Labrador carried out by the FFAW in collaboration with fish harvesters and DFO's Fisheries Science Collaborative Program.
- Studies to assess the health and distribution of cod in the northern Gulf of St. Lawrence (4RS3Pn), carried out by the FFAW in collaboration with fish harvesters and DFO's Fisheries Science Collaborative Program. These studies included a project to tag cod to assess their movements and distribution, as well as projects which examined the physiological condition and reproductive potential of cod.

Working again with the Newfoundland and Labrador Chef's Association, DFA promoted seafood products at "Songs, Stages, and Seafood" in Bay Roberts; "The Gathering" in Burlington; the Eastern Chef's Conference in St. John's; and at a James Beard culinary event in New York City. The combined cost of these events was approximately $6,400. The department also provided the Newfoundland and Labrador Association of Chefs and Cooks with a sponsorship of $10,000 to assist with participation in culinary competitions and endeavours.

In 2014-15, DFA partnered with the relevant government departments of other Atlantic Canadian provinces to create video and print materials promoting snow crab, Atlantic lobster, and Atlantic salmon. This campaign was targeted at the foodservice industry to inform chefs and culinary students of the benefits and versatility of these Atlantic Canadian species.

Under the Atlantic Canada Exports (ACE) banner, the Atlantic provinces continue to work together to promote Atlantic Canadian seafood. The group shared the cost of maintaining the ACE website, as well as advertising and events related to Seafood Expo Global, the China Fisheries and Seafood Expo, and Seafood Expo North America. A cost-shared program between the Atlantic provinces and ACOA provided the majority of the funding for these projects.

In 2014-15, DFA continued to work with industry, other Provincial Government departments, the Federal Government, and other jurisdictions to expand market access and address seafood tariffs. While the Federal Government has sole jurisdiction over the negotiation of international trade agreements, provinces and territories have been playing a more significant

role in recent years. The Canada-Korea Free Trade Agreement (CKFTA) entered into force on January 1, 2015, which constitutes Canada's first free trade agreement in the Asia-Pacific region.

DFA, in collaboration with industry and the Department of Business, Tourism, Culture and Rural Development (BTCRD) worked towards achieving real market access in the European Union (EU) through the Comprehensive Economic and Trade Agreement (CETA) in 2014-15. In addition, DFA collaborated with industry and BTCRD to assess other trade agreements.

DFA partnered with the PFHCB to continue the delivery of training to sealers who planned to harvest seal products, some of which were destined for international markets. The training pertained to the humane harvesting of seals and quality, health, and handling of seal products. DFA has a Memorandum of Understanding with the Canadian Food Inspection Agency, which developed a Code of Practice for the harvest, transport, processing, and export of these seal products, and allows for the export of Canadian seal products subject to the quality, health identification, and handling requirements of the Government of China. In 2014-15, the department contributed towards the cost of over 30 sealer information workshops, and assisted in their delivery to approximately 830 sealers.

Capitalizing on New Opportunities

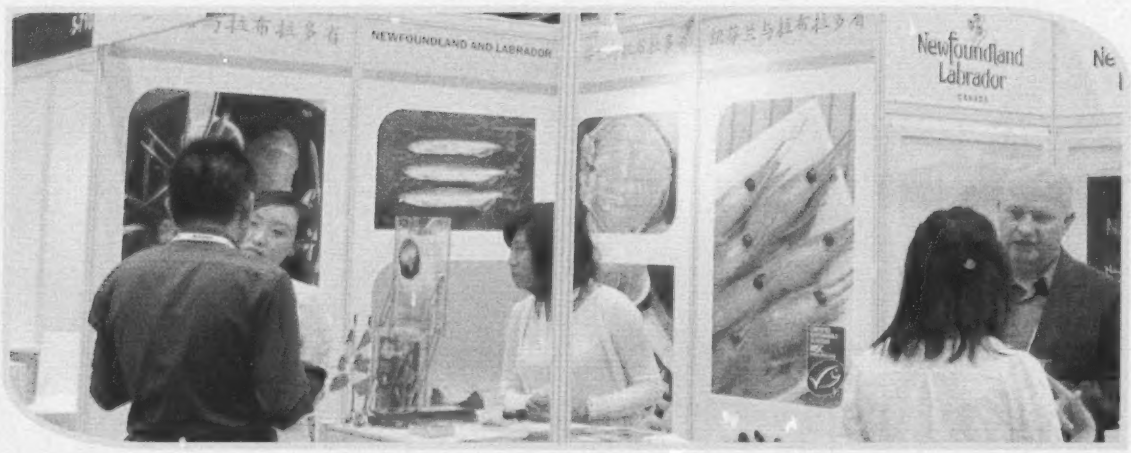
In 2014-15, the department capitalized on new opportunities in technology by working with the Office of the Chief Information Officer and with companies from the processing sector to test the prototype of the department's new online licensing service. This new online service will allow processors to submit renewal applications, reports, pay licence fees, and submit other requests and information electronically, improving response times and streamlining processes.

DFA will continue to work with industry to ensure opportunities presented in CKFTA, CETA, the Canada-Japan Economic Partnership Agreement, and the Trans-Pacific Partnership Agreement are capitalized upon, including the opportunity to brand products. Real market access achieved in these negotiations will result in significant benefits to the Newfoundland and Labrador seafood industry.

Sustainable Development and Management

In 2014-15, DFA concluded a five-year collaboration with ACOA, the Natural Sciences and Engineering Research Council of Canada, the Marine Institute (MI), the Newfoundland and Labrador Rural Development Council, and gear manufacturer Vonin Canada to develop and commercialize new bottom trawl fishing technology. This new technology is capable of catching commercial quantities of finfish and shellfish while significantly reducing environmental damage to the seabed, thereby contributing to fisheries sector viability. DFA contributed $250,000 towards the $4.3 million project.

DFA supported ASP by providing technical input into the development of Best Practices Booklets for harvesting and processing lobster and shrimp, with emphasis on quality assurance practices. These booklets described industry best practices regarding at-sea handling, holding, transportation, and processing, and were distributed to harvesters and processors across the province.



The department remains committed to sustainable development and management of both the fishing and aquaculture industries and worked with many partners in 2014-15 on initiatives to address this focus area of government's strategic direction. As a member of the Cod Rebuilding Working Group, DFA collaborated with DFO, the FFAW, OCI, the World Wildlife Fund, and other groups to develop a rebuilding plan for 2J3KL cod to support sustainable management. A rebuilding plan has already been adopted for 3Ps cod and a plan has been finalized for 4RS3Pn cod. DFA also participated in working group meetings to further refine the Precautionary Approach management framework already established for harp seals.

In 2014-15, DFA worked with the College of the North Atlantic to deliver Quality, Compliance and Enforcement Program training to the department's Fisheries Field Representatives. The Quality, Compliance and Enforcement Program is a modular training program designed to enhance and expand the skills of inspection staff. This program provides inspectors with classroom and hands-on training in compliance, enforcement, and quality assessments.

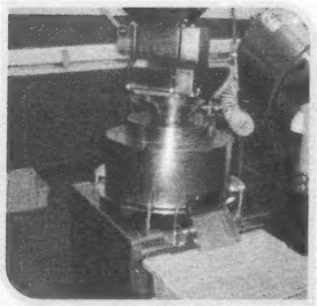
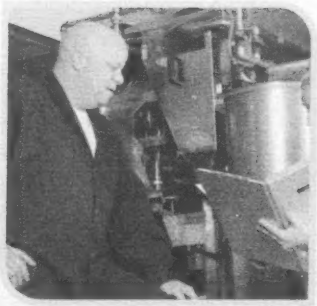
The department continued to be engaged with DFO on the development of the federal Aquaculture Activity Regulations and associated standards. The draft regulations are intended to clarify conditions under which aquaculture operators may treat their fish for disease and deposit organic matter, while ensuring the protection of fish, fish habitat, and overall sector sustainability. Departmental staff provided input into the process by participating on the Aquaculture Activities Regulations Technical Working Group, the group tasked with developing standards associated with the new regulations.

In 2014-15, DFA continued to participate in meetings of the Aquaculture Waste Management Committee to contribute to the sustainable management of the aquaculture industry. The committee was formed to address waste management issues in the province's aquaculture industry and is co-chaired by NAIA and DFA. Membership includes salmonid aquaculture companies operating in the province, ACOA, DFO, BTCRD, the Department of Environment and Conservation, as well as the Multi-Materials Stewardship Board and the Central Newfoundland Waste Management Authority. To date, work has focused on the salmonid aquaculture sector. The focus in 2014-15 was salmon stock mortality, a review of the sector's response to super-chill, and an investigation of ensiling practices.

SUSTAINABLE AQUACULTURE STRATEGY

In December 2014, the Department of Fisheries and Aquaculture released the Newfoundland and Labrador Sustainable Aquaculture Strategy 2014, which will guide the Provincial Government's future efforts to support aquaculture development. The strategy identified three priorities: aquaculture sustainable management, aquaculture support capacity, and aquaculture research and development. The strategy was developed in 2014-15 based on stakeholder and public input, using feedback received from more than 120 participants who engaged in aquaculture consultations conducted in 2013-14.

The new strategy addresses sustainability by committing to the implementation of a provincial fish health management plan, as well as encouraging enhancements to existing regional management plans. The strategy also supports capacity building by committing to help industry players enhance communications with the public, secure and develop human resources, and pursue international market opportunities. In terms of research and development, the strategy outlines the Provincial Government's intent to work with industry to support projects that prevent and mitigate the spread of aquatic invasive species and includes a commitment to develop improved monitoring and evaluation practices for aquaculture sites throughout the province.

STRATEGIC ISSUE 1:
FISHING INDUSTRY SUSTAINABILITY

GOAL:
By March 31, 2017, the Department of Fisheries and Aquaculture will have supported the fishing industry in becoming more sustainable and viable.

OBJECTIVE 1:
By March 31, 2015, the Department of Fisheries and Aquaculture will have supported the fishing industry to become more viable.

MEASURE:
Supported the fishing industry to become more viable.

INDICATORS:
- Invested in fisheries innovation
- Supported industry in its efforts to be more efficient
- Supported fisheries science
- Reviewed current policies and programs

OPENING DISCUSSION

The long-term social, cultural, and economic sustainability of the fishing industry is vital to the province, as it remains a key employer and contributor to the provincial economy, particularly in rural areas. The department has committed to work, within its jurisdictional authority, with the fishing industry to overcome external and domestic challenges so that the industry can be competitive and sustainable over the long term. In 2014-15, the department worked towards its first year's objective, under the Strategic Plan 2014-17, to provide support for a more viable fishing industry. The work included investments in and support of fisheries innovation, industry efficiency, fisheries science, and reviews of its own policies and programs. In completing this work, DFA will ensure optimum support to the fishing industry for the benefit of all participants, while ensuring the long-term security of resources for the benefit of future generations of Newfoundlanders and Labradorians. These supports and investments will contribute to fishing industry sustainability and viability and reflect government's strategic direction to strengthen the role of the fishing industry as a key pillar of economic growth within the province through the focus areas of fisheries sector viability and sustainable development and management.

RESULTS

INVESTED IN FISHERIES INNOVATION

The department's Fisheries Technology and New Opportunities Program is intended to assist the provincial fishing industry to become more innovative and competitive. In 2014-15, DFA committed to invest approximately $90,000, through FTNOP, in a project which utilized underwater cameras to record photo and video of the northern stone crab interacting with traps at different depths. The project was carried out by the Centre for Sustainable Aquatic Resources at MI in conjunction with a local fish harvester. The study evaluated the effectiveness of two styles of traps to retain stone crab while excluding other species, and determined which design characteristics were associated with success.

Also through FTNOP, the department committed:

- Over $38,000 to the Seafood Processors of Newfoundland and Labrador to conduct a technical evaluation of two innovative new automated crab butchering machines. The snow crab industry is very labour intensive. New technology will help automate the crab processing sector and help reduce labour costs, improve worker ergonomics, and address labour shortages.
- $100,000 to Clearwater Seafoods Limited (Grand Bank Seafoods) to design and build automated packaging technology. This new technology will allow the plant to increase its overall production, increase production to two shifts per day, and make adjustments to size packaging based on market specifications.
- $100,000 to Icewater Seafoods to purchase and install 3X frame cutter technology. This system is designed and built in Iceland for precise mincing of fish and is new to the fish processing industry in Newfoundland and Labrador. Icewater expects this machine will increase the mince value by 400 per cent and result in a better quality product which will allow it to be more competitive in the world market.

In addition to FTNOP projects, the department invested in fisheries innovation through its support of an innovative satellite tagging project for Atlantic halibut.

SUPPORTED INDUSTRY IN ITS EFFORTS TO BE MORE EFFICIENT

Supporting efficiencies in the harvesting and processing sectors, whether through energy efficiency or improved utilization of raw material, contributes to the overall viability of the Newfoundland and Labrador seafood industry. During 2014-15, DFA provided funding support through FTNOP for the following projects designed to foster efficiency.

- Approximately $65,000 was committed to Beothic Fish Processors Ltd. for the development of efficient heat pump drying technology that will significantly reduce energy consumption in comparison to conventional dryers.
- Shell-Ex, a company which processes marine byproducts that may otherwise be ocean dumped or landfilled, received $21,000 towards market development for crab shell by-product as a fertilizer additive. The chitin ingredient is a natural and organic addition to fertilizer to protect crops and plants. The increased use of processing by-product is just one way to practice efficient use of ocean resources.

- Quinlan Brothers Inc. received $100,000 towards the purchase, installation, and testing of an automated refrigeration control system which is expected to provide energy savings of 10-15 per cent, for a savings of over $100,000 annually.

SUPPORTED FISHERIES SCIENCE

In 2014-15, the department provided nearly $280,000 to industry and academia in support of fisheries science initiatives through its Fisheries Research Grant Program in order to enhance knowledge of adjacent fish stocks and thus inform sustainable fisheries management processes. Projects funded in 2014-15 included studies to investigate the distribution and migration patterns of cod and halibut in areas around the province using traditional tagging methods, as well as innovative satellite tagging. The department also supported the annual industry-DFO collaborative post-season snow crab survey in order to assess the biomass and recruitment prospects of snow crab in areas around Newfoundland and Labrador. A study to investigate potential locations of substantial spawning grounds for mackerel off the province's northeast coast, which has not previously been studied, was also funded to better inform the status of the mackerel resource.

In order to increase fisheries science capabilities in Newfoundland and Labrador, DFA also provided $2.35 million to fund the 2014-15 activities of CFER. CFER is utilizing innovative research techniques, such as satellite tagging and annual offshore acoustic surveys, to collect scientific data on fish stocks adjacent to the province. The results from CFER's research initiatives, many of which are conducted in collaboration with the fishing industry and the Federal Government, are resulting in a better understanding of the status of Newfoundland and Labrador's fisheries resources and marine ecosystem. CFER's work, along with other fisheries science initiatives, is helping to inform decisions that promote sustainable fisheries management, thus reflecting government's strategic direction through the focus areas of fisheries sector viability and sustainable development and management.

REVIEWED CURRENT POLICIES AND PROGRAMS

In 2014-15, DFA reviewed a number of its current policies and programs in support of the viability of the province's fishing industry.

These included the review of a number of the minimum processing requirements (MPRs). MPRs are set out in the Fish Inspection Operations Regulations under the provincial *Fish Inspection Act* and are intended to ensure optimum provincial economic benefits from adjacent fish resources, enabling harvesters to achieve a fair return on the sale of their catches and ensure there are reasonable levels of onshore processing employment. In 2007, a report by Burke Consulting Limited recommended that the Provincial Government maintain MPRs; however, the Minister of DFA has the legislative authority to exempt processors from MPRs on certain species and product types when it makes economic sense to do so. Species-specific exemptions have been granted on a case-by-case basis.

In 2014-15, DFA reviewed and revisited a number of MPRs for specific species in response to changing market requirements. They included:

- A review of the herring MPRs. In the past, fish harvesters had approached the department advising that they could not sell their herring to resident processors and had outside buyers looking for fresh herring for lobster bait. In 2014-15, the department initiated a pilot project to enable processors to ship out bulk herring to service the bait market in the Maritimes. As part of the project, the MPRs for herring were amended to allow bulk shipments of fresh herring to coincide with the spring and fall lobster fishery. The project objectives were to increase the volumes of herring landed in the province and enable harvesters to receive higher prices for their catches.
- An ongoing review of the MPRs for cod, in response to changes in the province's cod fishery and market forces. In 2013, prices for cod were low, the quality of catches was often low, and many harvesters were unable to sell their catches in the province. In late 2013, DFA had asked the Canadian Centre for Fisheries Innovation to explore, in collaboration with industry, ways to improve the economic value of provincial cod resources. In May 2014, upon review of the MPRs for cod and the market conditions at the time, the department implemented a pilot study to explore opportunities to fully utilize the cod resource in Northwest Atlantic Fisheries Organization Division 3Ps and enhance marketing capabilities by relaxing the MPRs for this species.
- In response to concerns raised by harvesters in fall 2014 over the lack of local markets for cod, the department also authorized outside buyers for 3Ps cod and invited in-province retail fish establishment processors to participate in the pilot study to market head-on-gutted 3Ps cod outside of the province. Overall general results of this initiative were higher landings, better quality, and higher average prices to harvesters. The department reviewed the results of the pilot project with a view towards establishing parameters for projects for the coming 2015-16 cod fishery.
- A review of the province's sea urchin fishery, including the MPRs, was completed in late 2014. The review included a study of the relevant Provincial Government legislation, regulations, and supporting policies, and was intended to provide guidance to DFA to optimize the performance of the sector. The report concluded that the right policy environment may significantly increase the value of this particular fishery and provided some recommendations regarding current regulations and policies for the department's consideration.

In addition to these reviews, the department reviewed its programming, as well as that of other Federal and Provincial Government departments, in relation to a number of key areas essential to improving the seafood industry's capacity to compete internationally. These include research and development, marketing initiatives, and fisheries science. This programming review was intended to provide a better understanding of the province's current status with regard to some of these key areas and provide recommendations to enhance and support both the fishing and aquaculture industries in the province. As such, informal reviews of some current departmental programs and services, most notably FTNOP and CFER operations funded by the department, highlighted the need for programs in the areas of research and development, as well as fisheries science.

DISCUSSION OF RESULTS

During 2014-15, the department was successful in addressing the issue of fishing viability through its provision of various supports to industry. DFA has undertaken a number of successful initiatives to invest in fisheries innovation, support industry efforts to become more efficient, and support fisheries science. It has also reviewed some of its policies and programs. In turn, these initiatives are directly supportive of the viability of the fishing industry. The review of policies enabled the department to be more responsive to the changing needs of industry and shifting market forces, in order to optimize value and utilize capacity in the processing sector, while allowing harvesters to sell their catches. Increased fisheries science capabilities contribute significantly to sustainable management, increased efficiency supports the optimal use of resources and lowers costs, and fisheries innovation fosters international competitiveness. All of these elements are key to the goal of a more sustainable and viable fishing industry.

COMMITMENT FOR 2015-16

OBJECTIVE 2:

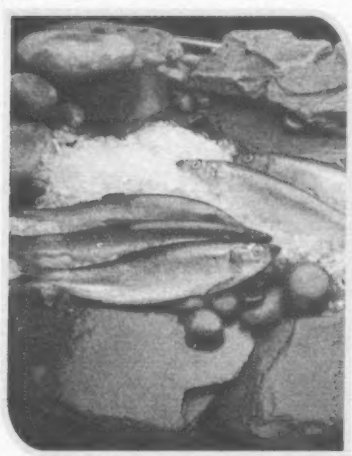
By March 31, 2016, the Department of Fisheries and Aquaculture will have supported the fishing industry to become more sustainable.

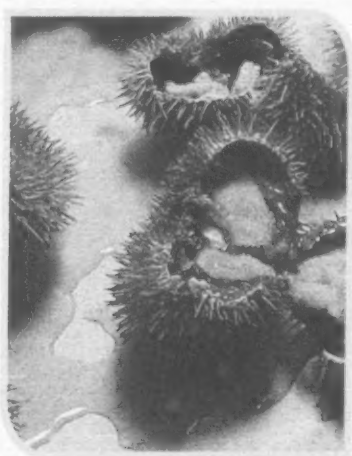
MEASURE:

Supported the fishing industry to become more sustainable.

INDICATORS

- Supported the development and testing of innovative harvesting technology
- Invested in fisheries science
- Participated in planning for the recovery of northern cod
- Supported activities that enable fisheries to meet sustainability certification criteria





STRATEGIC ISSUE 2:
AQUACULTURE SUSTAINABILITY

GOAL:
By March 31, 2017, the Department of Fisheries and Aquaculture will have supported improved sustainability of the aquaculture industry.

OBJECTIVE 1:
By March 31, 2015, the Department of Fisheries and Aquaculture will have commenced activities to foster the sustainability of the aquaculture industry.

MEASURE:
Commenced activities to foster the sustainability of the aquaculture industry.

INDICATORS:
- Developed a provincial aquaculture strategy
- Completed a review of regulations
- Supported industry-led aquaculture innovation

OPENING DISCUSSION

Aquaculture has become a key economic driver in rural regions of the province and the department is committed to fostering sustainability in this industry. In 2014-15, the department worked towards its first year's objective, under the Strategic Plan 2014-17, to commence activities to foster the sustainability of the aquaculture industry. This work included the completion of a new provincial aquaculture strategy that will provide a long-term plan to foster sustainability in Newfoundland and Labrador's aquaculture industry. The department also worked on areas within its direct influence to foster sustainability. This included a review of current aquaculture regulations, as well as providing support for industry-led aquaculture innovation. These activities foster the sustainability of the aquaculture industry and support the department's strategic direction to strengthen the role of the provincial aquaculture industry as a key pillar of economic growth in the province through the strategic focus area of sustainable development and management.

RESULTS

DEVELOPED A PROVINCIAL AQUACULTURE STRATEGY

The Newfoundland and Labrador Sustainable Aquaculture Strategy 2014 was released on December 16, 2014. This long-term plan will guide future policy and investment decisions aimed at fostering the sustainability of the aquaculture industry. This strategy was developed in consultation with industry representatives, research groups, non-governmental organizations, Aboriginal organizations, municipalities, and the general public. In 2014-15, DFA analyzed input from consultations conducted in 2013-14 and completed this strategy document internally. The strategy is focused on achieving gains in three key areas: enhancing sustainable management practices; growing capacity within the industry; and promoting research and development.

COMPLETED A REVIEW OF REGULATIONS

In September 2013, the department established the Aquaculture Regulatory Review Working Group to oversee a review of aquaculture regulations and provide feedback on regulation development. This committee consists of representatives from each DFA division involved with the aquaculture industry.

In April 2014, DFA's Aquaculture Regulatory Review Committee completed an internal review of the department's aquaculture regulations and policies with respect to industry-wide standards of sustainable management. Feedback from external stakeholder consultations was also included in this review process. This review will inform the process to amend existing regulations and whether to introduce new regulations.

SUPPORTED INDUSTRY-LED AQUACULTURE INNOVATION

Those directly involved in the industry are better positioned to understand its strengths and weaknesses, and have a vested interest in finding new ways to improve its sustainability. The department recognizes this and supported a variety of new innovations through FTNOP in 2014-15, as outlined below.

During 2014-15, the department provided Newfoundland Aqua Services Limited with $1 million to establish a land-based net-cleaning facility, as part of a two-year investment under the Aquaculture Capital Equity Program. This new technology will reduce the potential for environmental or aquatic animal health impacts from aquaculture net cleaning and repair activities, thus contributing to the sustainable development and management of aquaculture. This new land-based facility is in the latter stages of completion and is anticipated to be fully operational by fall 2015.

The department provided $80,000 to support NAIA in implementing a new fish health monitoring software package aimed at mitigating sea lice. Sea lice naturally occur in ocean environments and can negatively impact many species. With this internet-based software system, industry will have far greater capacity to monitor and mitigate the impact of sea lice on farmed fish. Integrating this leading-edge software into an already comprehensive program of fish health monitoring will allow the industry to sustain its strong reputation as a quality source of farmed seafood.

The department provided approximately $30,000 to support Sunrise Fish Farms Inc. in the development and implementation of a comprehensive Geographical Information Systems mussel farm management program. The implementation of the mussel farm management program will allow the company to have better traceability and food safety, while providing data for more accurate stock inventory and predictions of harvest biomass. This program will also provide data to processors and other clients who rely on estimates for marketing, production, and reporting purposes.

The department provided $4,680 to B & B Farms Ltd. to purchase and install mussel seed equipment which will increase the rate at which seed is harvested and collect seed that falls off the harvest conveyor. In 2014-15, the use of the unit increased harvest speed by 15 per cent and increased yield by approximately 15 to 20 per cent for the company. The seed capture unit on the end of the conveyor increased capture of seed by approximately 15-20 per cent.

Additionally, $9,000 was provided to LBA Enterprises Ltd. to purchase and utilize a mussel rope cleaning unit which will increase cleaning efficiency and extend the life of the rope. The usual practice of cleaning mussel lines involves letting the ropes dry in the sun and removing debris by hand. This is a very time consuming process and the ultraviolet rays from the sun decrease the life expectancy of the rope. The new rope cleaning unit will decrease the amount of time it takes to clean the production ropes and will reduce the rope's exposure to the sun, thereby extending the useful life of the rope. Rope is one of the biggest expenses incurred by mussel growers, so any steps that can increase its life span results in savings. The use of this mussel line cleaning unit will also increase seed collection on the rope, resulting in increased production. This will be the first rope cleaning unit used in the province's mussel sector.

DISCUSSION OF RESULTS

During 2014-15, the department was successful in fostering the sustainability of the aquaculture industry through a number of long-term and short-term initiatives. The Provincial Government established a new long-term approach to future aquaculture development with the release of the Newfoundland and Labrador Sustainable Aquaculture Strategy 2014, and also conducted a review of aquaculture regulations with respect to industry-wide standards and best practices. The review of regulations is an important step in identifying and addressing challenges to sustainability related to governance. Additionally, the department supported a variety of industry-led aquaculture innovations that will contribute to the sustainability of the aquaculture industry, including a new fish health monitoring software package; a comprehensive Geographical Information Systems mussel farm management program; mussel seed equipment; and a mussel rope cleaning unit. These activities foster aquaculture sustainability and address the department's goal to support improved sustainability of the aquaculture industry.

COMMITMENT FOR 2015-16

OBJECTIVE 2:

By March 31, 2016, the Department of Fisheries and Aquaculture will have updated aquaculture regulations and policies to foster the sustainability of the aquaculture industry.

MEASURE:

Updated aquaculture regulations and policies to foster the sustainability of the aquaculture industry.

INDICATORS:

- Supported the implementation of items identified under the Newfoundland and Labrador Sustainable Aquaculture Strategy 2014:
  - Aquaculture sustainable management
  - Aquaculture support capacity
  - Aquaculture research and development
- Reviewed aquaculture policies and procedures

STRATEGIC ISSUE 3:
MARKET DEVELOPMENT

GOAL:
By March 31, 2017, the Department of Fisheries and Aquaculture will have supported the fishing and aquaculture industries to capitalize on new market opportunities.

OBJECTIVE 1:
By March 31, 2015, the Department of Fisheries and Aquaculture will have commenced development of initiatives to support market development.

MEASURE:
Commenced development of initiatives to support market development.

INDICATORS:
- Supported new market research and intelligence
- Supported provincial participation in trade shows and missions
- Supported industry market certification and traceability
- Supported targeted promotional activities
- Supported product development, diversification, and branding

OPENING DISCUSSION

Export of provincial seafood products to international markets has continued to grow in recent years. The Provincial Government has made it a priority to support industry's marketing efforts and promote provincial seafood producers in international markets, as seen in its commitments to support various marketing initiatives, and its support for improved market access for the province's seafood industry. Throughout 2014-15, the department commenced the development of initiatives to support market development through its support of new market research and intelligence; participation in trade shows and missions, industry market certification and traceability; targeted promotional activities; and product development, diversification, and branding. DFA's support of these crucial activities contributes to the abilities of both the fishing and aquaculture industries to capitalize on new market opportunities. This support reflects government's strategic direction to strengthen the role of the fishing industry as a key pillar of economic growth within the province through the focus areas of market development and expansion and capitalizing on new opportunities.

RESULTS

SUPPORTED NEW MARKET RESEARCH AND INTELLIGENCE

DFA carried out market research on two additional species in 2014-15, Atlantic halibut and sea urchin. These species were added to the raw material price-setting process in 2014, therefore DFA provided its market research information to all parties engaged in collective bargaining for these species. In April 2014, DFA also engaged a consultant to provide a new market research and intelligence report for shrimp focused primarily on the United Kingdom market.

In 2014-15, DFA worked collaboratively with the other Atlantic provinces on an EU market research project in an effort to identify opportunities in the European market in advance of the implementation of CETA. The key countries targeted for this study were the Netherlands, France, Germany, and Belgium, with a focus on markets for lobster, oysters, mussels, snow crab, coldwater shrimp, herring, and whitefish (cod, flounder, haddock). An in-market consultant was hired to coordinate this project and the findings are expected to be presented to industry via webinar in fall 2015.

DFA also participated in a multi-sector China analysis project led by BTCRD which also included the Department of Advanced Education and Skills, Department of Natural Resources, and Department of Municipal and Intergovernmental Affairs. The study assessed the interaction between the province's key industry sectors and China, the effectiveness of those interactions, and opportunities and challenges facing the province in converting recent experience into sustainable progress in China. The final report was completed in February 2015 and will be used in 2015-16 to help develop a comprehensive provincial strategy for trade and investment with China.

SUPPORTED PROVINCIAL PARTICIPATION IN TRADE SHOWS AND MISSIONS

Three seafood companies exhibited in the department's booth within the Canadian Pavilion at Seafood Expo Global, Brussels, Belgium, in May 2014. Several other companies exhibited independently at the show. The department collaborated with the other Atlantic provinces to host a networking reception for participating seafood companies and buyers on the night before the show at the Canadian Ambassador's residence. The department also participated in a meeting of the other provincial and federal trade and market development officials and trade commissioners to discuss EU market trends, opportunities, market/trade development initiatives; a breakfast roundtable meeting for all Canadian delegates with guest speakers covering such topics as EU market trends and an update on CETA; and a logistics tour of the port of Antwerp and the border inspection post followed by a presentation on shipping logistics solutions.

The department participated in Seafood Expo Asia for the first time in 2014-15 to showcase Newfoundland and Labrador seafood products and to work with industry to further pursue market opportunities in Hong Kong. DFA worked closely with the Atlantic provinces and the Canadian Trade Commissioner Service to organize an information webinar on the Hong Kong seafood market. The department also co-hosted a networking event for seafood producers and buyers held at the residence of the Consul General of Canada in Hong Kong and Macao. Two seafood companies and one association co-exhibited in DFA's booth at this event and received financial assistance to help offset travel costs.

The department provided support to the Canadian Association of Prawn Producers to host an incoming media group mission from China. The group of food bloggers explored the Northern Peninsula, visiting fish harvesters, touring plants, sampling local seafood, and experiencing the hospitality and culture of the province.

For the ninth year, the department exhibited at the China Fisheries and Seafood Expo. Three companies co-exhibited in the Newfoundland and Labrador booth and an additional five companies had their own booth space. In collaboration with other Atlantic provinces, the department hosted a networking reception for seafood companies and buyers. Live chef demonstrations were carried out at the show to promote Atlantic Canadian seafood with a focus on shrimp, lobster, mussels, and snow crab.

In March 2015, the department participated in Seafood Expo North America (formerly the International Boston Seafood Show) with four industry participants. The booth, located within the Atlantic Canadian pavilion, featured a chef station, where two Newfoundland and Labrador chefs prepared a variety of seafood dishes and provided samples of the province's seafood to international buyers. On the night before the show, DFA hosted a networking reception attended by industry, their customers, trade commissioners, and other officials. The department also worked with the other Atlantic provinces to do joint advertising under the ACE branding and provide meeting space at the show for the use of Atlantic Canadian companies.

SUPPORTED INDUSTRY MARKET CERTIFICATION AND TRACEABILITY

Recognizing the importance of fishery certification and traceability to consumers and market opportunities as a whole, DFA supported a number of efforts to certify, recertify, or implement traceability initiatives for various fisheries in 2014-15.

The department provided support for 60 per cent of the actual costs, up to a maximum of $87,500, for OCI and Icewater Seafoods' plan to undertake full assessment of the 3Ps cod fishery to the Marine Stewardship Council (MSC) eco-certification standard. The companies had previously undertaken a pre-assessment process for certification. Funding was contingent on the companies sharing the assessment and subsequent certification with other provincial stakeholders on a fair cost recovery basis, for the benefit of the fishery.

With similar conditions of funding, the department also provided support to OCI for approximately 25 per cent of the actual cost, up to a maximum of $25,000, for the MSC reassessment of yellowtail flounder. Additionally, in 2014-15 DFA also delivered the final payment (due upon certification) on a 2010 commitment to support Barry Group Inc. in its bid for MSC certification of the 4R large vessel herring purse seine fishery, which received MSC certification in October 2014. To date, approximately 77 per cent of Newfoundland and Labrador seafood has been certified by the MSC.

The FFAW received support through FTNOP to continue with implementation of an ongoing traceability project for lobster and halibut. The project includes brand and website development, creation of a marketing strategy, and continuing the traceability program. This project allows consumers to trace their seafood directly to the harvester by entering the code found on the tag attached to the lobster or halibut on the website thisfish.info.

In 2014-15, the department worked with the World Wildlife Federation on the Sustainable Seafood Festival, set to take place in St. John's in the summer of 2015, with the goal of promoting the many MSC-certified seafood products available from the province.

SUPPORTED TARGETED PROMOTIONAL ACTIVITIES

During 2014-15, DFA worked with industry to support targeted promotional activities within the province and internationally. The department provided FTNOP funding to NAIA to assist with local promotional activities, including: cooking demonstrations and sampling at the Royal St. John's Regatta, the Salmon Festival, and the Agrifoods and Garden Show; and a blue mussels and Certified Cicerone session.

Through FTNOP, the department provided support for NAIA and Iceberg Select to attend and exhibit at Seafood Expo Asia and the China Fisheries and Seafood Expo. Seafood Expo Asia organizers offered product demonstration sessions for exhibitors, which allowed NAIA to promote Newfoundland and Labrador organic mussels to seafood buyers, host a cooking demonstration, and provide product samples. NAIA also carried out advertising locally and in the United States to promote the province's organic mussels.

Through FTNOP, the department continued its support of organic certification for the mussel industry, approving $100,000 for a NAIA project to increase export opportunities and market penetration for farmed blue mussels. Activities in 2014-15 under this project included: advertising and promotional campaigns; updating and enhancing the website promoting blue mussels; promotional videos of farm, processing, and cooking demos; participation at trade shows; and a sales mission to Asia.

The department also supported an ASP marketing initiative for coldwater shrimp in the United Kingdom. ASP partnered with Royal Greenland on a promotional campaign targeting foodservice and culinary schools in the United Kingdom. DFA provided $50,000 towards this generic marketing initiative.

The department also partnered with the other Atlantic provinces on a food service educational project. The purpose of the project is to provide educational and promotional tools to support international market development within the food service industry, focusing on the attributes of Atlantic Canadian seafood products. Videos and targeted literature will provide the rationale and knowledge to chefs and others in the food service industry on the value of having Atlantic Canadian seafood products on their menus. The collateral materials will help drive product sales and introductions to new markets. These tools can also be used by Canadian Trade Commissioners abroad in the promotion of Atlantic Canadian seafood. Seafood companies can also use the materials to complement their own marketing efforts. This project will be executed through two phases and will highlight six species of seafood grown or harvested in Atlantic Canada. Phase one focused on snow crab, lobster, and salmon and was completed in the summer of 2014. Phase two will highlight mussels, oysters, and coldwater shrimp and will be completed in the summer of 2015. Planning and development took place in 2014.

SUPPORTED PRODUCT DEVELOPMENT, DIVERSIFICATION, AND BRANDING

In 2014-15, DFA supported product development, diversification, and branding with multiple projects funded under FTNOP, as follows.

- Codroy Seafoods received funding to develop a new marketing brochure, branding, and packaging for their lobster products.
- Northern Lights Seafoods received $4,500 to engage a consultant to assist with the development of a new half-shell frozen scallop product currently not produced in the province. The consultant investigated equipment costs, markets, and training requirements to commercialize the production of this product.
- Icewater Seafoods Inc. was provided with $100,000 to enhance its processing operations at its Arnold's Cove facility with the installation of 3X frame cutter technology new to the industry. It is expected that this machine will increase the mince value by 400 per cent and result in a better quality product to allow them to be more competitive in the world market.

To promote diversification in the industry, the department also supports the processing and marketing of marine products and by-products in new ways, such as value-added marine bio-products. For example, Shell-Ex, a company which processes marine by-products, was provided with $21,000 to pursue market development for crustacean by-products. Approximately $10,000 was provided to the Centre for Aquaculture and Seafood Development at MI to explore the production of chitosan from shellfish waste using a steam explosion process. Chitosan products are used for a wide array of applications such as in cosmetic skin care products and as drug/vaccine carriers in the pharmaceutical industry.

DISCUSSION OF RESULTS

Throughout 2014-15, the department was successful in addressing the issue of market development by providing numerous supports to benefit industry participants. These supports included direct funding for promotional activities, trade show participation, traceability initiatives, and promotional activities, as well as product development, diversification, and branding. The department also provided market intelligence and research, and assisted industry to obtain and retain market certification. Trade shows and other promotional activities, along with branding, allow seafood companies to showcase their companies and products, while product development can represent an opportunity to fill a niche in the market. Successful traceability initiatives and certification provide a competitive edge in the global seafood market and a key component of market access in recent years. These supports provide industry players with many of the tools they need to access and compete in new and existing markets, thus contributing to the goal of supporting the fishing and aquaculture industries to capitalize on new market opportunities.

COMMITMENT FOR 2015-16

OBJECTIVE 2:

By March 31, 2016, the Department of Fisheries and Aquaculture will have continued the development of initiatives to assist industry to pursue new market opportunities.

MEASURE:

Continued the development of initiatives to assist industry to pursue new market opportunities.

INDICATORS:

- Expand market research and intelligence
- Supported provincial participation in trade shows and missions
- Supported industry market certification and traceability
- Supported targeted promotional activities
- Supported product development and diversification

FISHING INDUSTRY
OPPORTUNITIES AND CHALLENGES

The fishing industry remains an important economic driver in Newfoundland and Labrador's economy. The department continues to work with industry and other stakeholders to ensure the province's fishing industry adapts to changing conditions and remains competitive in the marketplace.

OPPORTUNITIES

In the harvesting sector, increased science and research capabilities, largely from the activities of CFER, inform sustainable resource management. In turn, these capabilities are strengthening the province's engagement in the Federal Government's fisheries resource management process.

In the fish processing sector, the delivery of the Inspection Program by DFA contributes to improved seafood product quality in the province and, as such, increases seafood producers' competitiveness in the marketplace. Also, DFA's fish processing licensing policy is aimed at achieving rationalization in the industry. It supports conditions for a stable and competitive processing sector with enhanced product quality and improved total returns from processing available resources in the province.

FTNOP is helping the fishing industry adapt and succeed by encouraging innovation and supporting the pursuit of new opportunities. Projects funded by FTNOP support the long-term viability of the province's harvesting sector by improving efficiency and product quality, while reducing environmental impact. In the fish processing sector, FTNOP provides opportunities for increased research and development which is helping improve operational efficiency. Additionally, FTNOP is supporting innovative approaches in seafood processing to improve product quality, providing access to new markets.

For seafood marketing, increased global seafood consumption and diversified high-end markets have positive impacts on the province's seafood exports. Continued eco-certification and product traceability initiatives are assisting the industry in gaining and maintaining market access as the demand for sustainable seafood continues to rise. Trade agreements provide opportunities for the industry to eliminate trade barriers and pursue potential export growth.

The recent CKFTA will provide opportunities for provincial seafood producers to capitalize on South Korea's growing seafood market. Upon entry into force, CETA will provide the province's seafood industry with unprecedented tariff-free access to the lucrative EU seafood market and provide Newfoundland and Labrador producers with opportunities to develop new value-added and branded seafood products.

Despite numerous challenges, the department remains committed to the development of new opportunities for the sealing industry. We continue to work closely with industry stakeholders to develop new products and new markets, including China.

CHALLENGES

The province's seafood industry continues to face external challenges which impact margins, including competition from low-cost producers, trade embargos and bans, exchange rate fluctuations, and high overhead costs.

Internal challenges include overcapacity in both the harvesting and processing sectors, the seasonality of the industry, aging infrastructure, and resource uncertainty. For example, while there are signs of improvement in northern cod and other groundfish stocks, there are signs of decline in shellfish stocks. The province's fishing industry, once very dependent on groundfish, has been focused on shellfish for much of the last two decades, and any future shift will represent a challenge on many levels.

The seafood industry faces workforce challenges. Both the harvesting and processing sectors' workforces are aging. Attraction and retention of new workers is difficult due to seasonal employment, non-competitive wages, and other employment alternatives. Evolving technology in the work environment requires workers to receive specialized training before entering the industry. Although improved technology brings opportunities for sustainable development of the fishing industry, specialized training required for new participants will require government to work with industry and academic partners to enhance skills training where necessary.

AQUACULTURE INDUSTRY
OPPORTUNITIES AND CHALLENGES

The Department of Fisheries and Aquaculture recognizes the significant and growing social and economic contribution that aquaculture is having on rural communities within the province. The department continues to work closely with industry and other stakeholders to facilitate sustainable expansion.

OPPORTUNITIES

The development climate for the provincial aquaculture industry is favourable. Newfoundland and Labrador remains one of the last regions in Canada that has not been developed to its full potential. The province has an abundance of marine space that is well-suited for aquaculture development, particularly for the three current commercial species (Atlantic salmon, steelhead trout, and blue mussels). Additionally, a skilled and experienced workforce is supported by collaborative relationships among industry, government, and academia.

The recently released Newfoundland and Labrador Sustainable Aquaculture Strategy 2014 will guide future policy and investment decisions aimed at fostering the success of the aquaculture industry. Additional opportunities for growth are being supported through various departmental initiatives, including marine infrastructure development, remote aquaculture site analysis, Bay Management Area development, and aquatic animal health capacity expansion.

The department is also working with stakeholders and local governments to identify opportunities to capture additional components of the aquaculture supply chain. Atlantic salmon hatchery planning and development, along with the development of industry support services such as site engineering and net cleaning, provide further economic and employment opportunities in rural Newfoundland and Labrador.

From a marketing perspective, there is increasing demand for high-quality, sustainable seafood. Sustainability is important to buyers and consumers, causing retailers and food service operators to adopt procurement policies to ensure the seafood products they purchase are grown, harvested, and processed in a manner that is sustainable and environmentally responsible. In particular, interest and demand for blue mussels in the marketplace are growing, providing market opportunities for Newfoundland and Labrador producers. The mussel

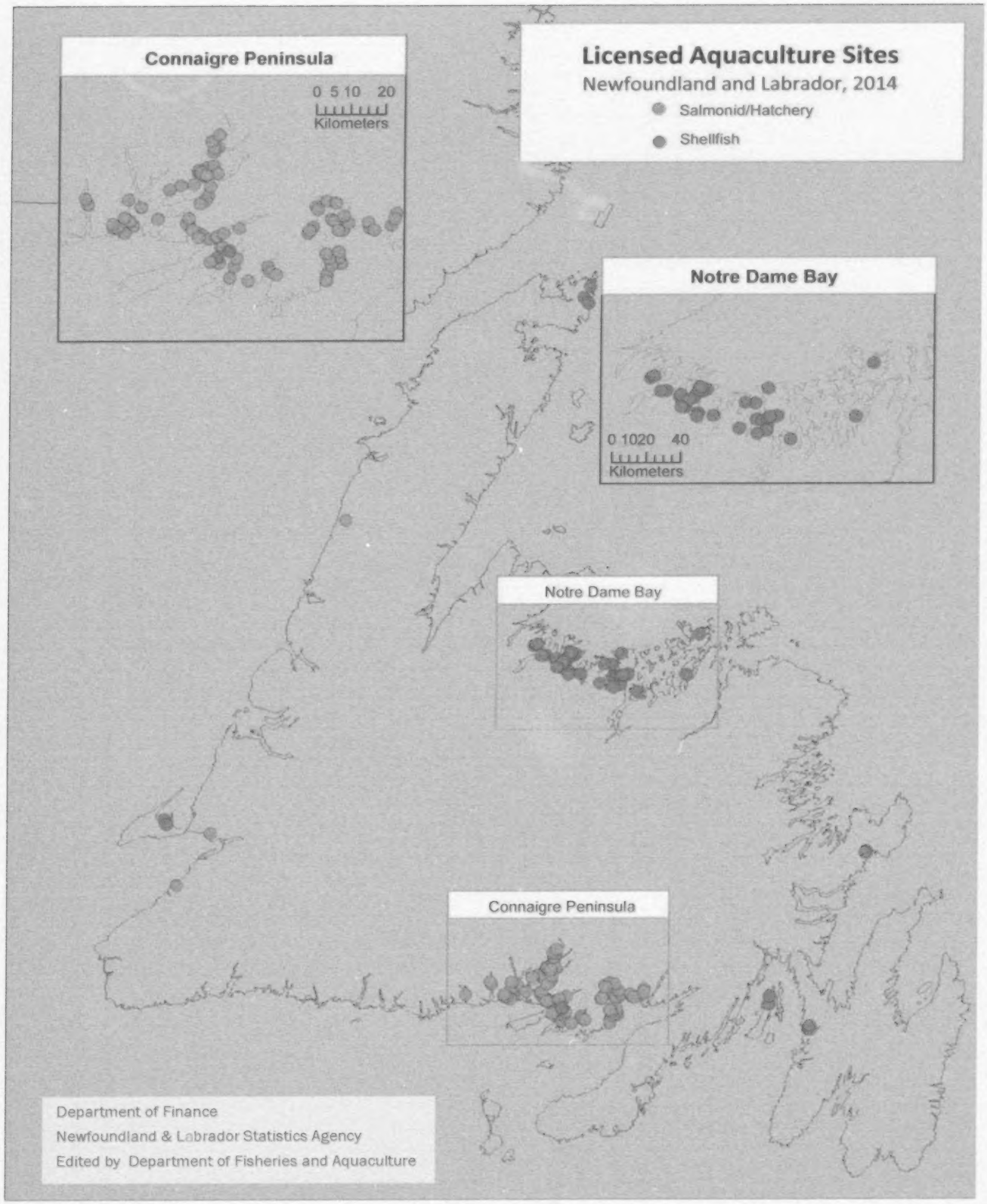
sector's certification to the Canadian Organic Aquaculture Standard was the first such mussel certification in North America. Currently, eight mussel producers and four processors in our province meet this standard. This improves Newfoundland and Labrador's competitiveness, providing local producers with a unique opportunity to establish new markets. Some major salmon producers in the province have achieved certification for their salmon products as well, with one producer receiving the first ever four-star certification for a salmon company through the Global Aquaculture Alliance Best Aquaculture Practices Program.

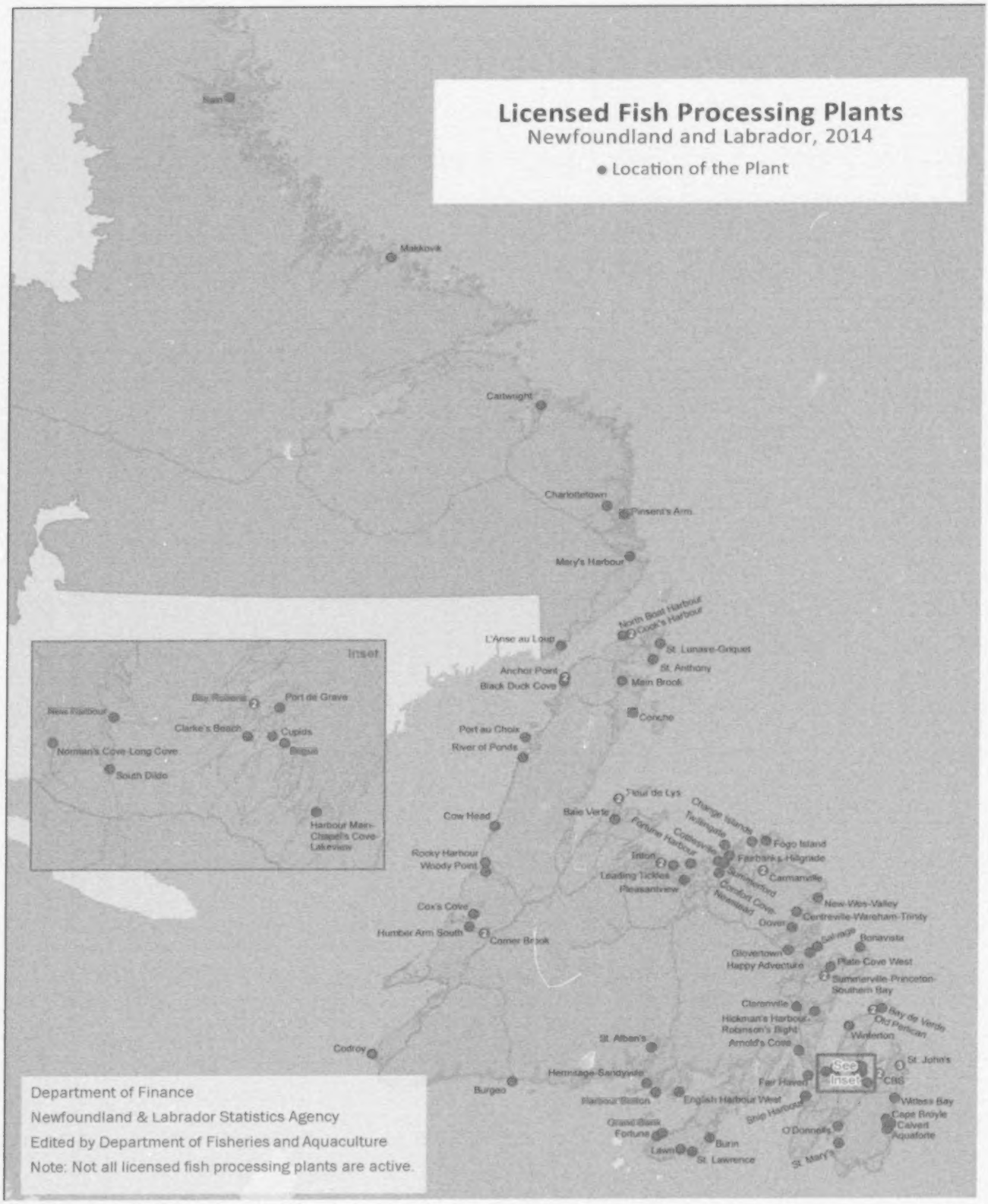
CHALLENGES

The external factors that may impede the development of the province's aquaculture industry include market price fluctuations, exchange rate volatility, access to capital, competition from producers in other provinces and countries, high fish food costs, and environmental conditions. While increased market demand in recent years has brought opportunities for the industry, increasing production in a sustainable manner to meet that growing demand and maintain market access can be a challenge to the industry.

There are also internal factors that may impede the development of the industry if not addressed, including the need for improved marine infrastructure, increased biosecurity approaches, a flexible and efficient regulatory environment, increased aquatic animal health management services, and the need to address public misinformation regarding aquaculture risks. DFA is already working on initiatives to address these identified challenges.

From a human resources perspective, the major challenges will be attracting and retaining highly skilled employees and providing specialized training on evolving technologies in the work environment. All these factors have the potential to impede the sustainable development of the aquaculture industry in Newfoundland and Labrador.


Licensed Aquaculture Sites
Newfoundland and Labrador, 2014
Salmonid/Hatchery
Shellfish
Connaigre Peninsula
0 5 10 20
Kilometers
Notre Dame Bay
0 1020 40
Kilometers
Notre Dame Bay
Connaigre Peninsula
Department of Finance
Newfoundland & Labrador Statistics Agency
Edited by Department of Fisheries and Aquaculture


Licensed Fish Processing Plants
Newfoundland and Labrador, 2014
● Location of the Plant
Nain
Makkovik
Cartwright
Charlottetown
Pinsent's Arm
Mary's Harbour
L'Anse au Loup
North West Harbour
Cook's Harbour
St. Lunaire-Griquet
St. Anthony
Anchor Point
Black Duck Cove
Main Brook
Conche
Port au Choix
River of Ponds
Inset
Bay Roberts
Port de Grave
New Harbour
Clarke's Beach
Cupids
Bagus
Norman's Cove-Long Cove
South Dildo
Harbour Main-Chapel's Cove-Lakeview
Cow Head
Rocky Harbour
Woody Point
Bale Verte
Fleur de Lys
Change Islands
Twillingate
Fortune Harbour
Cobbs Arm
Fogo Island
Fairbanks-Hilgrade
Carmanville
Triton
Leading Tickles
Pleasantview
Summerford
Comfort Cove-Newstead
New Wes-Valley
Centreville-Wareham-Trinity
Dover
Sub-rage
Bonavista
Glovertown
Happy Adventure
Plate Cove West
Summerville-Princeton-Southern Bay
Clarenville
Hickman's Harbour-Robinson's Blight-Arnold's Cove
Bay de Verde
Old Perlican
Winterton
St. John's
CBS
Witless Bay
Cape Broyle
Calvert
Aquaforte
Cox's Cove
Humber Arm South
Corner Brook
Codroy
St. Alban's
Burgeo
Hermitage-Sandyville
Harbour Breton
English Harbour West
Fair Haven
Ship Harbour
O'Donnels
St. Mary's
Grand Bank
Fortune
Lawn
Burin
St. Lawrence
See Inset
Department of Finance
Newfoundland & Labrador Statistics Agency
Edited by Department of Fisheries and Aquaculture
Note: Not all licensed fish processing plants are active.

Special Feature

The Economic Impact of Aquaculture

The provincial aquaculture industry has experienced significant growth over the past decade. Increased investment in the industry has created employment and other economic opportunities in rural regions of this province. In January 2015, DFA released Economic Impacts of the Newfoundland and Labrador Aquaculture Industry to quantify the social and economic impacts generated by aquaculture activity.

The report analyzed the industry's direct and spin-off impacts on provincial Gross Domestic Product (GDP), employment, and labour income over the 2003-2013 period. Direct activities refer to aquaculture hatchery and grow-out operations; spin-off activities include companies that provide supplies or services to the aquaculture industry as well as consumer spending by those employed though aquaculture.

GROSS DOMESTIC PRODUCT

GDP represents the amount of new revenue generated from aquaculture activity within the province, through direct and spinoff activities. Between 2003 and 2013, total GDP grew from $10.5 million to $104.1 million, with a compound annual growth rate of 25.7 per cent. In 2013, direct GDP was estimated to be 63.6 per cent of total GDP, illustrating that a significant amount of revenue generated is through spin-off activities associated with aquaculture.

EMPLOYMENT

Employment estimates the number of full-time positions created within the province due to aquaculture activity. Direct and spin-off employment grew from 225 in 2003, to 872 in 2013. The majority of employment generated is attributable to salmonid aquaculture. In 2013, salmonid sector employment accounted for 84.1 per cent of total aquaculture employment.

LABOUR INCOME

Labour income estimates the amount of personal income earned by individuals direct and indirectly employed in the aquaculture industry. In 2013, total labour income was $36.7 million, up from only $5.9 million in 2003. Labour income grew at a compound annual growth rate of 20 per cent over the study period.

A full copy of the report can be found on the Department of Fisheries and Aquaculture website at http://www.fishaq.gov.nl.ca/publications.

Committee Participation*

NATIONAL COMMITTEE PARTICIPATION:

- Canada/France Fisheries Advisory Committee
- Redfish Working Group
- Canadian Council of Fisheries and Aquaculture Ministers, with associated task groups, working groups, and committees
- Canadian delegation to Northwest Atlantic Fisheries Organization meetings
- Canadian Food Inspection Agency Working Group for Disease Control
- Committee on the Status of Endangered Wildlife in Canada
- Federal and Provincial Introductions and Transfer Committee
- Federal/Provincial Export Market Development Consortium
- Federal/Provincial Market Development Council
- Fur Institute of Canada Sealing Committee
- Health Canada Expert Advisory Panel on Veterinary Drugs
- National Fish Health Management Working Group
- Seafood Value Chain Roundtable

REGIONAL/PROVINCIAL COMMITTEE PARTICIPATION:

- Atlantic Council of Fisheries and Aquaculture Ministers with associated task groups,
- working groups, and committees
- Atlantic Coastal Action Plan Humber Arm Environmental Association/Bay of Islands Coastal Management Area Committee
- Atlantic Coastal Zone Information Steering Committee
- Canada-Newfoundland and Labrador Committee on Ocean Management
- Atlantic Seal Advisory Committee
- Atlantic Large Pelagic Advisory Committee
- Atlantic Seafood and Food Trade Group
- Bay St. George and Port au Port Peninsula Marine and Coastal Resources Steering Committee
- Coast of Bays Coastal Planning Committee
- Eastern Aquaculture Veterinary Association (sub-committees)
- Gulf Groundfish, Gulf Shrimp, and Gulf Capelin Advisory Committees
- Newfoundland and Labrador Aquatic Invasive Species Steering Committee
- Newfoundland and Labrador Regional Cod Recovery Working Group
- Newfoundland Lobster Sustainability Board – Executive Committee
- Offshore Clam, Atlantic Mackerel, and Northern Shrimp Advisory Committees
- Small Pelagic Advisory Committee
- Placentia Bay Integrated Management Planning Committee
- Provincial Coastal and Ocean Network
- Regional Oversight Committee on Oceans Management
- Regional Snow Crab Committee
- 3Ps and 2+3KLNO Groundfish Advisory Committees
- Atlantic Regional Interdepartmental Shellfish Committee
- Newfoundland and Labrador Molluscan Shellfish Working Group

**Note: These lists are not exhaustive.*

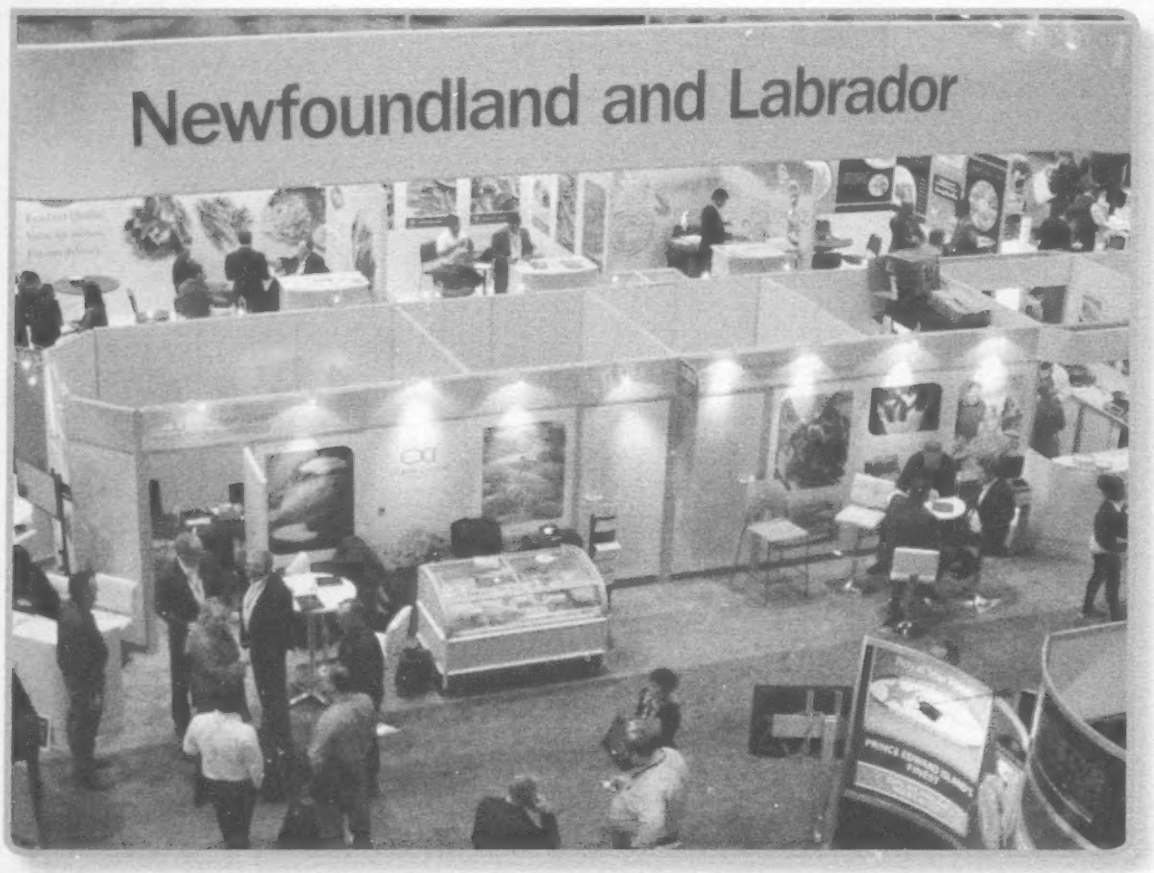
Event Participation*

TRADE EVENTS:

- Seafood Expo Global, Brussels, Belgium - May 2014
- Seafood Expo Asia, Hong Kong, China - September 2014
- China Fisheries and Seafood Expo, Qingdao, China - November 2014
- Seafood Expo North America, Boston, Massachusetts - March 2015

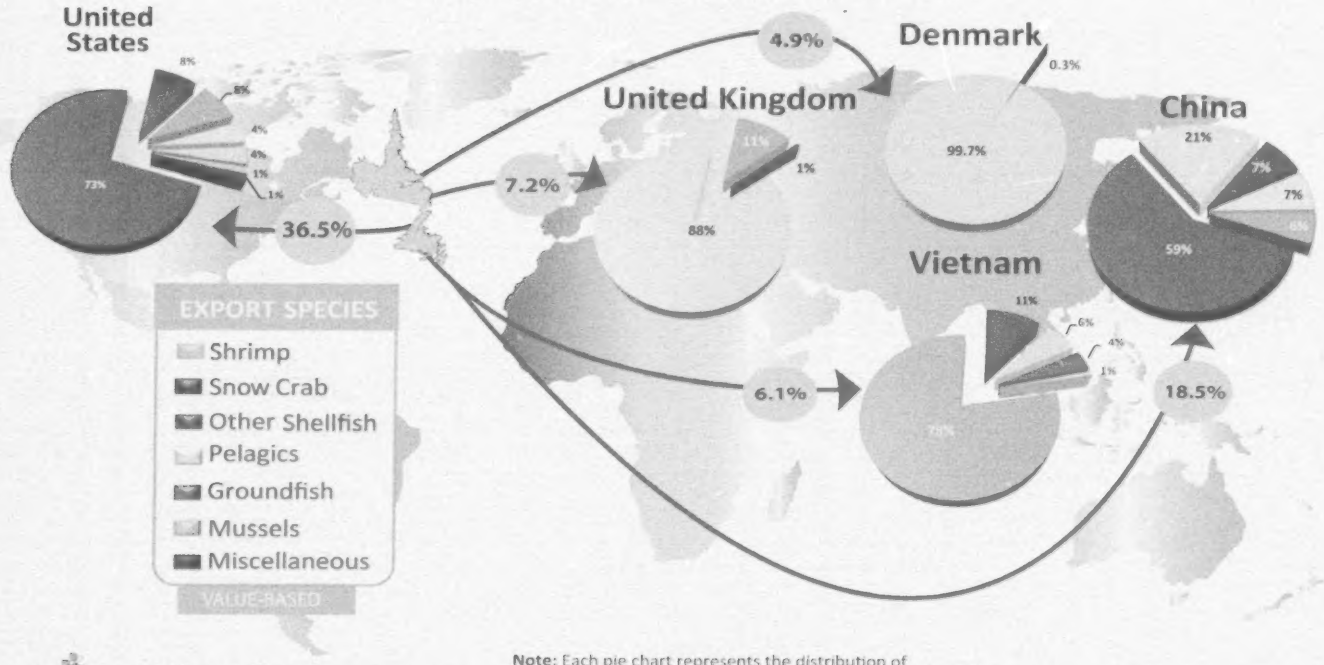
CONFERENCES AND EVENTS:

- Canadian Council of Fisheries and Aquaculture Ministers, Calgary, Alberta - June 2014
- Atlantic Council of Fisheries and Aquaculture Ministers, Cardigan, Prince Edward Island – October 2014
- Atlantic Fisheries and Aquaculture Committee, Ottawa, Ontario – December 2014, March 2015
- Cold Harvest 2015 - Newfoundland Aquaculture Industry Association Trade Show, Gander, Newfoundland and Labrador - February 2015
- Coastal Zone Canada Conference, Halifax, Nova Scotia - June 2014



**Note: These lists are not exhaustive.*

TOP FIVE WORLD MARKET DESTINATIONS FOR SEAFOOD PRODUCTS
NEWFOUNDLAND AND LABRADOR, 2014



Newfoundland Labrador

Department of Finance
Newfoundland & Labrador Statistics Agency
Edited by Department of Fisheries and Aquaculture

Note: Each pie chart represents the distribution of products within the identified country based on export value. Species components may not sum due to independent rounding.

Source: Statistics Canada

Global seafood demand and prices remained strong in 2014. Consumers were attracted by the health benefits of seafood consumption. An increase in income and an improvement in distribution channels also contributed to the strong prices experienced in 2014. Newfoundland and Labrador seafood is exported to more than 40 countries around the globe. In 2014, the province's seafood industry exported products valued at nearly $883 million, up approximately 6.7 per cent from 2013. The corresponding volume of seafood exports decreased, down 4.6 per cent to 137,800 tonnes.

The United States remained the largest export market for Newfoundland and Labrador seafood, representing 36.5 per cent of export value in 2014. China followed as the second largest export destination, representing 18.5 per cent of export value. Other key markets, also based on export value, included the United Kingdom at 7.2 per cent, Vietnam at 6.1 per cent, Denmark at 4.9 per cent, and Russia at 4.4 per cent. These markets represented 77.6 per cent of the province's value of seafood exports.

After appreciating for a number of years, the Canadian dollar has been depreciating against currencies such as the United States dollar, the British pound, and the euro. A weaker Canadian dollar results in higher returns to Canadian producers from seafood exports. However, the dollar has continued to strengthen against the Japanese yen, having the opposite effect on the value of seafood exports to Japan.

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Newfoundland Labrador

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